NEW NAMES AND COMBINATIONS, PRINCIPALLY IN THE ROCKY MOUNTAIN FLORA--IV

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A NEW GENUS OF GRASSES FROM THE WESTERN OIL SHALES

ARGILLOCHLOA W. A. Weber, **gen. nov.** (Poaceae)

Gramen perenne, inflorescentis non secundis, ramis floriferis rigidissimo-divaricatis basalibus 2, spiculis 2-floribus, gluma secundo lemma secundum aequans, lemmatibus sterilibus nullis vel rudimento clavato sterili faciens, a Festuca differt.

Type species: **Argillochloa dasyclada** (Hackel ex Beal) W. A. Weber, **comb. nov.** Festuca dasyclada Hack. ex Beal, Grasses N. Amer. 2:602. 1875. Derivation from Greek, argillos, clay (including shale), + chloe, grass.

Festuca dasyclada, until very recently, was known from the type locality (Wasatch Plateau, Emery County, Utah), but field knowledge was nil. Irvine et al. (1978), reporting it from Colorado, wrote: "This plant was listed as "possibly extinct" in the "Report on Endangered and Threatened Species of the United States"... Only two vouchers of this taxon exist in major herbaria (US, NY), and mention of the species last occurs in the second edition of Hitchcock's treatment of the grasses...."

This species was reported from Colorado (Irvine, l.c.) from the Upper Parachute Member of the Green River Formation and the Uinta Sandstone throughout Garfield County, Colorado. Recent activity involving environmental impact research has added a number of localities in Rio Blanco County at altitudes from 2,135-2,580 meters (7,120-9,000 ft.). Argillochloa often occurs abundantly on shaded slopes in mountain shrub communities (e.g. Padus virginiana, Juniperus osteosperma, Amelanchier utahensis, Symphoricarpos oreophilus stands), here to the exclusion of Oryzopsis.

The plant is a bunch-grass with a very strong but superficial resemblance to Oryzopsis hymenoides, and occurring near it on the same areas of shale scree slopes. The two grasses seem to have slightly different ecological preferences, however, because stands of Argillochloa are never as ubiquitous as those of Oryzopsis, which commonly colonizes mixed soils of eroding road banks as well as the pure shale slopes.

Argillochloa differs strikingly from Festuca by its rigidly divaricate secondary branches, at the bases of which a strongly-developed convex, often red, pulvinus fills the axils; the spike-

lets have an unusually long second glume which equals the second lemma; the spikelets have two fertile florets; the terminal rachilla is either naked or sometimes topped by an early-deciduous sterile rudiment; the lowermost branchlets of the inflorescence are paired; the inflorescence is not at all secund as in Festuca; at maturity the flowering culms commonly break away and behave like tumbleweeds. The habit is extremely unusual for Festuca, at least as it is known in America.

Signe Frederiksen (Univ. of Copenhagen, corresp.) has kindly made a thorough anatomical analysis of Argillochloa and found that, as she expected, "the anatomy is within the variation of the genus Festuca, but the question is how important that observation is." She continues: "According to Metcalfe (1960: Anatomy of Monocotyledons I. Anatomical evidences concerning genera and species: '.... there is a marked overlap in the characters of those genera that are generally accepted as being closely related to one another. This seems to indicate that differences between closely related genera, based on leaf characters alone, would be of little taxonomic value.' I would like to turn it around and say that if the morphological characters are strong enough to separate this taxon from Festuca, then resemblance in the anatomy of the leaf blade is of minor significance." Frederiksen was impressed by the morphological divergence of Argillochloa from Festuca noted herein.

I am greatly indebted to Dr. Dieter Wilken, Colorado State University, who has determined the chromosome number, 2n=28 (14 bivalents at metaphase). This is consistent with the basic number of Festuca and allies (x=7) and represents a modal number for many western North American species. Voucher specimen: Wilken 13567 (CS), Rio Blanco Co.: Piceance Creek, 2 mi W of Rio Blanco, 22 Sept. 1979.

NEW COMBINATIONS IN LINUM, SENS. LAT.

ADENOLINUM GRANDIFLORUM (Desf.) W. A. Weber, **comb. nov.** Linum grandiflorum Desf., Flora Atlantica 1:278. t. 78. 1798.

ADENOLINUM PRATENSE (Norton) W. A. Weber, **comb. nov.** Linum lewisii pratense J. B. S. Norton, Trans. Acad. Sci. St. Louis 12:38, pl.6. 1902. Rogers (1968), in a review of the yellow-flowered species of Linum in western North America, did not concern himself with the generic problem in the genus Linum, sens. lat. Linum is based on the type, Linum usitatissimum L., a blue-flowered annual species with linear stigmas and erect flowers and basic chromosome number, x=15. In western North America, the blue-flowered group, Adenolinum Reichenbach (1837), has capitate stigmas and recurved fruiting pedicels, and basic chromosome number x=9. The pale yellow-flowered group consists of two well-defined line, both with x=8, though otherwise cytologically distinct according to Löve (corresp.): one, Cathartolinum Rchb. (1837), based on Linum catharticum L., with white petals with

yellow claws. The other is Rogers' L. schiedeanum complex, which Small (1907) included in his broadly construed Cathartolinum, differing significantly in fruit dehiscence, ovule number, pollen morphology, style morphology, and basic chromosome number x=8, from Mesynium Raf. (1838) (Rogers' L. rigidum group) with a basic chromosome number of x=15. Rogers clearly tabulated these important differences but declined to divide the genera. Löve & Löve recently revived Adenolinum and Mesynium (Löve 1982), quite justifiably in my opinion. With Adenolinum, Cathartolinum s. str., and Mesynium segregated, the L. schiedeanum complex forms a distinct group, but it needs more study before assigning it generic status.

MESYNIUM Raf., Fl. Telluriana 3:33. Nov.-Dec. 1837. A lectotype should be designated. Of the five species mentioned, M. texanum was new, three others were nom. nuda, and M. mexicanum (H.B.K.) Raf., was a transfer. I propose M. mexicanum be chosen as the lectotype.

MESYNIUM ALATUM (Small) W. A. Weber, **comb. nov.** Cathartolinum alatum Small, N. Am. Fl. 25:81. 1907.

MESYNIUM ARISTATUM (Engelm. in Wisliz.) W. A. Weber, **comb. nov.** Linum aristatum Engelm. in Wisliz., Tour Northern Mexico 101. 1848.

MESYNIUM AUSTRALE (Heller) W. A. Weber, **comb. nov.** Linum australe Heller, Bull. Torr. Bot. Club 25:627. 1898.

MESYNIUM AUSTRALE ssp. GLANDULOSUM (C. M. Rogers) W. A. Weber, **comb. nov.** Linum australe var. glandulosum Rogers, Sida 1:336. 1964.

MESYNIUM IMBRICATUM (Raf.) W. A. Weber, **comb. nov.** Nezera imbricata Raf., New Flora & Bot. North Amer. 4:66. 1838.

MESYNIUM HUDSONIOIDES (Planch.) W. A. Weber, **comb. nov.** Linum hudsonioides Planch., Lond. J. Bot. 7:186. 1848.

MESYNIUM PUBERULUM (Engelm. in A. Gray) W. A. Weber, **comb. nov.** Linum rigidum var. puberulum Engelm. in A. Gray, Smithson. Contr. Knowl. 3 (Pl. Wright. 1): 25. 1852.

MESYNIUM SUBTERES (Trel. in A. Gray) W. A. Weber, **comb. nov.** Linum aristatum Engelm. var. subteres Trel. in A. Gray, Syn. Fl. N. Am. 1(1):347. 1897.

MESYNIUM VERNALE (Wooton) W. A. Weber, **comb. nov.** Linum vernale Wooton, Bull. Torr. Bot. Club 25:452. 1898.

ALETES (APIACEAE): AN EXPANDED CONCEPT

Despite the fact that many eminent American botanists have attempted to classify the western North American Apiaceae, several genera remain to some extent artificial. While one complete treatment (Mathias and Constance, 1944-45) has tended to stabilize and reduce a number of generic names, the submergence of some of the old genera has simply served to hide the fact that large ones like Lomatium and Cymopterus are still very heterogeneous, and unless monographers of some of the allied genera carefully reexamine these large ones for misfits, this situation will likely continue.

The history of classification of the western North American umbels also displays a lack of consideration of the whole organism, its total morphology and habitus, its chemistry, phytogeography and its ecology--the whole constellation of characters. Too much emphasis, I feel, has been placed on too few.

The genus Aletes is based on Aletes acaulis C. & R., 1888 (Deweya acaulis Torr.). A revision of this genus was published very recently (Theobald, Tseng and Mathias, 1963). It was undertaken as a result of my rediscovery of Neoparrya lithophila and my suggestion, which they accepted, that Pteryxia anisata should be referred to Aletes. I have never been satisfied with the maintenance of Neoparrya as a monotypic genus, and recently (Weber 1979) I transferred a second taxon, N. megarrhiza, out of Lomatium, where it was anomalous.

Theobald et al., while they described a few new taxa, did not examine other genera for possible transfers to Aletes. They also deferred study of Pteryxia and implied that they were about to study Cymopterus. They pointed out, however, Cronquist's (1961) expansion of Cymopterus to include two more somewhat discordant elements, Pteryxia and Pseudocymopterus.

Theobald et al. described Aletes as "perennials from slender to thickened alongated roots". This is inaccurate. The structures they refer to are caudices that are covered with marcescent sheathing petiole bases, a critical difference. I would expand their generic concept to include plants with yellow, pale yellow to whitish and exceptionally (as in Pseudocymopterus) purple, flowers. And I would allow for considerable variation in the number, size and disposition of the vittae, and in the compression and development of the lateral and dorsal wings of the mericarps. I agree completely when they say that "the genus is remarkably consistent in its habit and basic leaf pattern". Their monograph is a good starting point, but more bricks need to be laid in order to make the building complete.

Without seriously altering the circumscription provided by Theobald et al., I regard Aletes as a natural group embodying the following unique constellation of characters:

1. Plants densely caespitose with stout, branched caudices clothed with long-enduring marcescent petiole-bases.
2. Strictly acaulescent (this eliminates Pteryxia terebinthina and C. beckii Welsh & Goodrich, which are always slightly caulescent); these may yet prove to belong to Aletes.
3. Pseudoscapes never developed.
4. Plants strongly scented (anise, citronella, celery).
5. Leaves pinnatifid or pinnate, with pinnae simple or pinnatifid, usually stiff-textured.
6. Bracteoles always well-developed, lance-linear to linear, dimidiate.
7. Involucre never developed.

8. Flowers yellow, pale yellow, whitish, or exceptionally purple.
9. Rays subequal, widely spreading, sometimes the outer ones deflexed at maturity.
10. Mericarps with variable development of lateral wings; dorsal ridges often prominent.
12. Mericarps usually trapezoidal in cross-section, not or variably dorsally compressed.
13. Stylopodium none, the styles arising out of the base of a spongy disk (some authors seem to have confused this disk with a low stylopodium).

If, bearing in mind this set of characters, one returns to the standard treatment of North American umbels, several taxa stand out in Lomatium, Pteryxia and Cymopterus as discordant elements. Furthermore, these taxa have always been controversial, placed variously in other discarded genera such as Cynomarathrum, Pseudoreoxis and Pseudopteryxia.

The following new combinations are proposed to bring these taxa into Aletes.

ALETES BIPINNATA (S. Wats.) W. A. Weber, **comb. nov.** Pseudocymopterus bipinnatus C. & R., Rev. N. Am. Umbell. 75. 1888.

ALETES EASTWOODIAE (C. & R.) W. A. Weber, **comb. nov.** Cynomarathrum eastwoodiae C. & R., Contr. U. S. Nat. Herb. 7:247. 1900.

ALETES HENDERSONII (C. & R.) W. A. Weber, **comb. nov.** Pseudocymopterus hendersonii C. & R., Contr. U. S. Nat. Herb. 7:190. 1900.

ALETES JUNCEA (Barneby & Holmgren) W. A. Weber, **comb. nov.** Lomatium junceum Barneby & Holmgren, Brittonia 31:96. 1979. Barneby & Holmgren (1979), in recognizing and presenting a key to the "Cynomarathrum species of Lomatium" saw the natural group that I feel is incorrectly placed in Lomatium, but they made no connection with Aletes. They, however, included L. triternatum and L. concinnum, two caulescent species, in the group.

ALETES LATILOBA (Rydb.) W. A. Weber, **comb. nov.** Cynomarathrum latilobum Rydb., Bull. Torr. Bot. Club 40:73. 1913.

ALETES LITHOPHILA (Mathias) W. A. Weber, **comb. nov.** Neoparrya lithophila Mathias, Ann. Mo. Bot. Gard. 16:393. 1929.

ALETES LONGILOBA (Rydb.) W. A. Weber, **comb. nov.** Pseudopteryxia longiloba Rydb., Bull. Torr. Bot. Club 40:72. 1913. Mathias, Theobald & Tseng (1964) did not include this taxon in their monograph of Aletes (despite the fact that Rydberg clearly showed its close relationship to P. anisata), probably because Mathias had earlier synonymized it (incorrectly, I feel) under Pteryxia hendersonii. Mathias et al. (1964) declined to discuss Pteryxia. A. longiloba differs from A. anisata chiefly in its more delicate leaf texture and more slender and attenuate leaf segments, but displays the same strong anise scent.

ALETES MEGARRHIZA (A. Nels.) W. A. Weber, **comb. nov.** Peucedanum megarrhizum A. Nels., Bull. Torr. Bot. Club 26:130. 1899.

ALETES MINIMA (Mathias) W. A. Weber, **comb. nov.** Lomatium minimum Mathias, Ann. Mo. Bot. Gard. 25:273. 1937.

ALETES NIVALIS (S. Wats.) W. A. Weber, **comb. nov.** Cymopterus nivalis S. Wats., Bot. King's Exp. 123. 1871.

ALETES NUTTALLII (A. Gray) W. A. Weber, **comb. nov.** Seseli nuttallii A. Gray, Proc. Amer. Acad. 8:287, in part. 1870.

ALETES PARRYI (S. Wats.) W. A. Weber, **comb. nov.** Peucedanum parryi S. Wats., Proc. Amer. Acad. 11:143. 1876.

ALETES PETRAEA (M. E. Jones) W. A. Weber, **comb. nov.** Cymopterus petraeus M. E. Jones, Contr. W. Bot. 8:32. 1898.

ALETES SCABRA (C. & R.) W. A. Weber, **comb. nov.** Cynomarathrum scabrum C. & R., Contr. U. S. Nat. Herb. 7:247. 1900.

ASKELLIA, A NEW SEGREGATE OF THE GENUS CREPIS

ASKELLIA W. A. Weber, **genus nov.** (Asteraceae).

Based on Crepis, Sect. Ixeridopsis Babcock, Univ. Calif. Publ. Bot. 22:212. 1947. Typus: Crepis nana Richardson. This genus, differing morphologically and cytologically from Crepis and Psilochenia (Crepis, sens. lat., cf. Babcock 1938, see Weber 1983), represents an Old World group with a basic chromosome number of x=7. It is named in honor of my friend Áskell Löve, student of Arne Müntzing and Eric Hultén, dean of the Icelandic flora, founder and first president of the International Organization of Plant Biosystematists. His dedication to the Science of Botany, his encyclopedic memory of botanical information, his understanding of biosystematic, especially cytological, techniques and his exposition of its philosophy, his role in developing the concept of the Flora Europaea and, in its earliest phase, what became the Flora North America Project, has earned him lasting recognition as one of the outstanding plant taxonomists of our generation. His kindness and support of colleagues and young botanists is well-known and appreciated by all who have benefitted from knowing him.

ASKELLIA ALAICA (Krasch.) W. A. Weber, **comb. nov.** Crepis alaica Krasch., Tr. Bot. Inst. AN SSSR, ser. 1,1:182. 1933.

ASKELLIA CORNICULATA (Regel & Schmalh.) W. A. Weber, **comb. nov.** Crepis corniculata Regel & Schmalh., Izv. Obsc. Ljubit. Estestv. Antrop. Etnogr. 34(2):54. 182.

ASKELLIA ELEGANS (Hook.) W. A. Weber, **comb. nov.** Crepis elegans Hook., Fl. Bor.-Amer. 1:297. 1834.

ASKELLIA FLEXUOSA (Ledeb.) W. A. Weber, **comb. nov.** Prenanthes polymorpha gamma flexuosa Ledeb., Fl. Altaica 4:145. 1833.

ASKELLIA KARELINII (M. Pop. & Schischk. in Popov) W. A. Weber, **comb.nov.** Crepis karelinii M. Pop. & Schischk. in Popov, Fl. Almat. zapovedn., Addenda 28:757. 1940.

ASKELLIA LACTEA (Lipsch.) W. A. Weber, **comb. nov.** Crepis lactea Lipsch., Fedde's Repert. 42:159. 1937.

ASKELLIA NANA (Richards.) W. A. Weber, **comb. nov.** Crepis nana Richards., Bot. App. Franklin, 1st Jour. ed. 1:746. (p.18 in repr.) 1823; ed. 2:757 (p.29 in repr.). 1823.

ASKELLIA NANA ssp. RAMOSA (Babcock) W. A. Weber, **comb. nov.** Crepis nana ssp. ramosa Babcock, Univ. Calif. Publ. Bot. 22:542. fig. 155. 1947.

ASKELLIA SOGDIANA (Krasch.) W. A. Weber, **comb. nov.** Youngia sogdiana Krasch., Bot. Mat. Herb. Bot. Inst. AN SSSR 9(4-12):184. 1946.

THE WESTERN NORTH AMERICAN WOODY SAGEBRUSHES

The western North American woody sagebrushes centering about Artemisia tridentata belong to a homogeneous group of similar morphology and ecology, differing from all other local Artemisia in having homogamous heads. One additional species was described from southern South America. Related species in Eurasia were segregated from Artemisia by Polyakov (1961) based on the type species Seriphidium maritimum (L.) Pol. Artemisia, Section Seriphidium had been proposed for this group by Besser (1829) and accepted by Hooker (1833) for Artemisia cana Pursh. Rouy (1903) treated it as Artemisia, Subgenus Seriphidium. The American species were treated by DeCandolle (1837) as Artemisia, Sect. Seriphidium, subsect. Trifida. This group has been treated exhaustively by Ward (1953). Earlier accounts include those of Rydberg (1916) and Hall & Clements (1923).

The North American members of the genus Seriphidium form a very natural unit and I propose recognizing them as a subgenus under the genus Seriphidium Polyakov.

SERIPHIDIUM, Subgenus TRIDENTATA (McArthur) W. A. Weber, **subgenus nov.** Based on Artemisia, Subgenus Tridentata ["Tridentatae"] McArthur (1981); Artemisia, subsect. Trifida DC., Prodr. 6:105. 1837. Typus: Seriphidium canum (Pursh) W. A. Weber. In this subgenus I include Rydberg's Subgenus Seriphidium of Artemisia, encompassing his Sections Tridentatae, Rigidae and Pygmaeae. McArthur (1981) included only Section Tridentatae Rydb.

SERIPHIDIUM ARBUSCULUM (Nutt.) W. A. Weber, **comb. nov.** Artemisia arbuscula Nutt., Trans. Amer. Phil. Soc. II. 7:398. 1841.

SERIPHIDIUM ARBUSCULUM ssp. LONGILOBUM (Osterh.) W. A. Weber, **comb. nov.** Artemisia spiciformis var. longiloba Osterh., Muhlenbergia 4:69. 1908.

SERIPHIDIUM CANUM (Pursh) W. A. Weber, **comb. nov.** Artemisia cana Pursh, Fl. Amer. Sept. 521. 1814.

SERIPHIDIUM CANUM ssp. BOLANDERI (A. Gray) W. A. Weber, **comb. nov.** Artemisia bolanderi A. Gray, Proc. Amer. Acad. 19:50. 1883.

SERIPHIDIUM CANUM ssp. VISCIDULUM (Osterh.) W. A. Weber, **comb. nov.** Artemisia cana var. viscidula Osterh., Bull. Torr. Bot. Club 26:507. 1900.

SERIPHIDIUM PYGMAEUM (A. Gray) W. A. Weber, **comb. nov.** Artemisia pygmaea A. Gray. Proc. Amer. Acad. 21:413. 1886.

SERIPHIDIUM NOVUM (A. Nels.) W. A. Weber, **comb. nov.** Artemisia nova A. Nels., Bull. Torr. Bot. Club 27:274. 1900.

SERIPHIDIUM RIGIDUM (Nutt.) W. A. Weber, **comb. nov.** Artemisia trifida beta rigida Nutt., Trans. Amer. Phil. Soc. II. 7:398. 1841.

SERIPHIDIUM ROTHROCKII (A. Gray) W. A. Weber, **comb. nov.** Artemisia tridentata ssp. rothrockii Hall & Clements, Carnegie Inst. Wash. Publ. 326:139. 1923.

SERIPHIDIUM TRIDENTATUM (Nutt.) W. A. Weber, **comb. nov.** Artemisia tridentata Nutt., Trans. Amer. Phil. Soc. II. 7:398. 1841.

SERIPHIDIUM TRIDENTATUM ssp. PARISHII (A. Gray) W. A. Weber, **comb. nov.** Artemisia parishii A. Gray, Proc. Amer. Acad. 17:220. 1882.

SERIPHIDIUM TRIDENTATUM ssp. VASEYANUM (Rydb.) W. A. Weber, **comb. nov.** Artemisia vaseyana Rydb., N. Amer. Flora 34:283. 1916.

SERIPHIDIUM TRIDENTATUM ssp. WYOMINGENSE (Beetle & Young) W. A. Weber, **comb. nov.** Artemisia tridentata ssp. wyomingensis Beetle & Young, Rhodora 67:405. 1965.

SERIPHIDIUM TRIPARTITUM (Rydb.) W. A. Weber, **comb. nov.** Artemisia tripartita Rydb., Mem. N. Y. Bot. Gard. 1:432. 1900. trifida Nutt., 1841, non Turcz. 1832.

Artemisia bigelovii A. Gray bears a strong superficial resemblance to Seriphidium, Subg. Tridentata, but Hall & Clements, and Ward, considered it to belong to Artemisia, Sect. Abrotanum. Shultz (1983, ined.) brings further evidence to bear toward this conclusion.

Artemisia mendozana DC., Prodromus 6:105. 1837, was included in the Subsect. Trifida by DeCandolle and presumably belongs in Seriphidium, but not having seen any material I hesitate to transfer it at this time.

Artemisia palmeri A. Gray, included by Ward, and Hall & Clements under Sect. Seriphidium remains anomalous, differing by its chaffy receptacle, elongate herbaceous branches, bicolored, deeply incised leaf-blades suggestive of A. vulgaris, and nearly equal phyllaries. I lean toward retaining Artemisiastrum Rydberg for this monotype.

MISCELLANY

ACROLASIA THOMPSONII (Glad) W. A. Weber, **comb. nov.** Mentzelia thompsonii Glad, Madrono 23:289. 1976.

BROMELICA BULBOSA (Geyer ex Porter & Coulter) W. A. Weber, **comb. nov.** Melica bulbosa Geyer ex Porter & Coulter, Syn. Fl.

Colo. p. 149. 1874. The articulation of the spikelets above the glumes, the lack of tendency of the spikelets to nod, and the world distribution patterns of Melica typified by M. nutans L. according to Tzvelev (1976) and Bromelica (Boyle, 1945), suggest that these groups represent different phyletic lines.

BROMELICA SPECTABILIS (Scribn.) W. A. Weber, **comb. nov.** Melica spectabilis Scribn., Proc. Acad. Nat. Sci. Phila. 37:45. 1885.

DELPHINIUM RAMOSUM Rydb. var. **ALPESTRE** (Rydb.) W. A. Weber, **comb. nov.** Delphinium alpestre Rydb., Bull. Torr. Bot. Club 29:146. 1902.

IPOMOPSIS STENOTHYRSA (A. Gray) W. A. Weber, **comb. nov.** Gilia stenothyrsa A. Gray, Proc. Amer. Acad. 8:276. 1870.

NUTTALLIA ARGILLOSA (Darlington) W. A. Weber, **comb. nov.** Mentzelia argillosa Darlington, Ann. Mo. Bot. Gard. 21:153. 1934.

NUTTALLIA REVERCHONII (Urb. & Gilg) W. A. Weber, **comb. nov.** Mentzelia pumila (Nutt.) T. & G. var. reverchonii Urb. & Gilg, Nov. Act. Nat. Cur. [Abh. K. Leop.-Carol. Deutsch. Akad. Naturf.] 76:94. 1900. Mentzelia reverchonii Thompson & Zavortink, Wrightia 4:24. 1968.

OLIGOSPORUS CAMPESTRIS (L.) Cass. ssp. **CAUDATUS** (Michx.) W. A. Weber, **comb. nov.** Artemisia caudata Michx., Fl. Bor. Amer. 2:129. 1803. The genus Oligosporus was proposed by Cassini for those groups of Artemisia with staminate disk flowers (Section Dracunculus of Hall & Clements, 1923).

OLIGOSPORUS CAMPESTRIS (L.) Cass. ssp. **PACIFICUS** (Nutt.) W. A. Weber, **comb. nov.** Artemisia pacifica Nutt., Trans. Amer. Phil. Soc. II. 7:401. 1841.

OLIGOSPORUS FILIFOLIUS (Torr.) W. A. Weber, **comb. nov.** Artemisia filifolia Torr., Ann. Lyc. N. Y. 2:211. 1828.

OLIGOSPORUS PEDATIFIDUS (Nutt.) W. A. Weber, **comb. nov.** Artemisia pedatifida Nutt., Trans. Amer. Phil. Soc. 11. 7:399. 1841.

PACKERA OODES (Rydb.) W. A. Weber, **comb. nov.** Senecio oodes Rydb., Bull. Torr. Bot. Club 33:158. 1906.

VITICELLA ORIENTALIS (L.) W. A. Weber, **comb. nov.** Clematis orientalis L., Sp. Pl. 543. 1753.

CORRECTIONS

In a previous paper (Weber & Löve 1981), inadvertent errors were made concerning the following new combinations and their basionyms. I am indebted to Dr. T. M. Barkley for drawing them to my attention.

Packera cana f. eradiata (D. C. Eaton) Weber & Löve, **comb. nov.** Senecio canus var. eradiatus D. C. Eaton in S. Wats., Bot. King's Expl. 190. 1871.

Packera cymbalarioides (Buek) Weber & Löve, **comb. nov.** Senecio cymbalarioides Buek, Index DC. Prodr. 2:6. 1840.

Packera rosei Weber & Love, based on Senecio rosei Greenman sine diagn. is a nomen nudum.

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